

MONTANA

MONTANA

SOUTH
DAKOTA

IDAHO

WYOMING

NEBRASKA

UTAH

Location of the Powder River basin

TERTIARY	PALEO. 3	POWDER RIVER BASIN WEST EAST				
H		LEBO SHALE MBR.				· ×
쁘		Eğ	£ LEBO	SHALE MBR,		FT.
			TUL	LOCK MBR.		
	?-		ANCE FM. K HILLS SS.	FOX HILLS SS.		
UPPER CRETACEOUS				FO	A MILLS 55.	
		TECKLA SS. MBR. LEWIS SH.				
		TEAPOT SS MBR. PARKMAN SS. MBR.				
		MESA.	PARKMAN SS. MBR.	PIERRE SH.		
		-				
		CO	JSSEX SS. MBR			
		SI	HANNON SS. MBR		44000 - 04 54	
		0	TEELE SH			
		N	IOBRARA MBR.	NIOBRARA FM SAGE BREAKS MBI CARLILE SH. TURNER SANDY ME		KC MDD
		SAGE BREAKS MBR.				
		ER	WALL CREEK MBR.	POOL CREEK MB		K MBR.
		FRONTIER FM.	BELLE FOURCHE MBR.	GREENHORN FM.		
		SR.	"2nd WALL CREEK SAND"	BELLE FOURCHE SH.		6.0
		ш.	BELLE FOURCHE MBR.			äH.
_						- 200
S			MOWRY SH	MOWRY SH.		
~	0		MUDDY SS.	NEWCASTLE SS.		
OWER	CE	T	HERMOPOLIS SH. SKULL CREEK S			1.
NO	CRETACEOUS	Zd		Z &		
ĭ		KARA	LAK	OTA FM		KARA
	O	=X		ימים בומים מים מים מים מים מים מים מים מים מים		
		-	MORRISON FM.	MORRISON		الملك
		"LIPPER SLINDANCE" REDWAT			SH. MBR.	VII.
		N.		DIDIDIO	MINIMA	PER S
JURASSIC		107		PINE BUTTE MBR. LAK MBR.		
o	2	Š	"LOWER SUNDANCE"	PINE BUTTE MBR. PINE BUTTE MBR. LAK MBR. HULETT SS. MBR.		
ν ο		DAI	LOTTETT GOTTET THE			WDD O
Ξ		"LOWER SUNDANCE"		STOCKADE BEAVER SH. MBR. CANYON SPRINGS SS. MBR.		
		TIT				
		-	GYPSUM	SPRING FM.		M
	?	99				
			POPO			
			AGIE FM.	7-444		
5	5	ATE	CRDW MTN. SS.	-		
0	2	8	ALCOVA LS			- Line
TRIASSIC		CHUGWATER	RED PEAK FM.	SPEARFISH FM.		
		0		SPEAL	SPEARFISH FM.	
			LITTLE MEDICINE LS.			
		l . L	MBR.			
		N	FREEZEOUT SH. MBR.			
	,	300SE EGG	ERVAY MBR	PINE SALT MBR.		
-		W L	DIFFICULTY SH, MBR.			
DCDMIAN	Š	So	FORELLE LS. MBR.		LE LS. MBR.	
WC		8	GLENDO SH. MBR.		GLENDO SH, MBR	
200	7		MINNEKAHTA LS. MBR.	MINNEKAHTA LS.		
			OPECHE SH. MBR.	OPECH	HE SH.	
		III			HILLIAN	
			A HALLAND MAN			
PENNSYL.	-	TENSLEEEP SS. AMSDEN FM. AND			LEO SS	
S	AN					
Z	VANIAN			MINNELUSA FM.		
PE	>		CORRELATIVES			
1000		CORRELATIVES		money	MILLIAM	MINIT
MISSIS- SIPPIAN (part)		MADISON LS		minimum	للاللللللللللللللللللل	لمالملله
				MA	DISONES	
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ISS	P					

Generalized stratigraphic column in the Powder River basin

EXPLANATION

• Borehole. Number is elevation in feet.



Elevation of mapped interval in feet.

Structure values were not corrected nor labeled as anomalous in wells with inclination of beds, faulting, or problems of hole deviation. Such occasional conditions are more likely to occur in the southeast portion of the map and along deformed margins of the basin.



Generalized outcrop of the Upper Cretaceous Lance Formation and Fox Hills Sandstone, undivided.



Generalized outcrop of the Upper Cretaceous Fox Hills Sandstone.

Data from which this map was constructed are stored in a database of formation tops and bases determined from electric logs of 186 wells penetrating Upper Cretaceous and older rocks. These logs are shown in 22 cross sections of the Powder River basin by James E. Fox, 1986 (U.S. Geological Survey Open—File Reports OF 86—465A through OF 86—465V). The map was produced by using the Interactive Surface Modeling 1 (ISM) program of Dynamic Graphics, Inc. Values at some of the data localities may not be as closely honored as on a hand—contoured map because of the mathematical constraints of the mapping program.

This map is prepared in part for the Evolution of Sedimentary Basins program.

1 Any use of trade names is for descriptive purposes and does not imply endorsement by the U.S. Geological Survey.

This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards.

